

**In the Claims:**

Please cancel claims 1, 38-55, 68, 92 and 93. Please add new claims 94-116. The following is a complete listing of the claims.

**Claims 1-93 (Cancelled)**

94. (New) A method of regulating intraocular pressure by inhibiting sodium-hydrogen antiport activity in the eye, comprising administering to ciliary epithelial cells in an eye of a human or an animal having a trabecular network a pharmaceutical composition, wherein the pharmaceutical composition comprises a pressure-modulating amount of at least one sodium-hydrogen exchanger (NHE) inhibitor.

95. (New) The method of claim 94, wherein the at least one sodium-hydrogen exchanger (NHE) inhibitor is a sodium-hydrogen exchanger isoform 1 (NHE1) inhibitor.

96. (New) The method of claim 94 wherein the NHE inhibitor is selected from the group consisting of an amiloride, ethyl-isopropyl-amiloride (EIPA), dimethylamiloride (DMA), HOE694, methylpropylamiloride, a cariporide, and analogs thereof.

97. (New) The method of claim 94, wherein the pharmaceutical composition further comprises an inhibitor of a  $\text{Na}^+ \text{-} \text{K}^+ \text{-} 2\text{Cl}^-$  symport.

98. (New) The method of claim 97, wherein the  $\text{Na}^+ \text{-} \text{K}^+ \text{-} 2\text{Cl}^-$  symport inhibitor is bumetanide.

99. (New) The method of claim 94, wherein the pharmaceutical composition further comprises an inhibitor of anion exchanger isoform 2 (AE2).

100. (New) The method of claim 99, wherein the inhibitor of anion exchanger isoform 2 is 4,4'-diisothiocyanatostilbene-2,2'-disulfonate (DIDS).

101. (New) The method of claim 94, wherein the pharmaceutical composition further comprises at least one compound selected from the group consisting of miotics, beta blockers, carbonic anhydrase inhibitors, and precursor prostaglandins.

102. (New) The method of claim 94, wherein administration of the pharmaceutical composition is topical, intravitreous, via an ocular insert, or via an implanted reservoir.

103. (New) The method of claim 94, wherein the human or the animal having a trabecular network has glaucoma.

104. (New) The method of claim 94, wherein the human or the animal having a trabecular network is subject to glaucoma.

105. (New) The method of claim 94, wherein the pharmaceutical composition consists essentially of a pressure-modulating amount of at least one sodium-hydrogen exchanger inhibitor.

106. (New) The method of claim 105, wherein the at least one sodium-hydrogen exchanger (NHE) inhibitor is a sodium-hydrogen exchanger isoform 1 (NHE1) inhibitor.

107. (New) The method of claim 105, wherein the NHE inhibitor is selected from the group consisting of an amiloride, ethyl-isopropyl-amiloride (EIPA), dimethylamiloride (DMA), HOE694, methylpropylamiloride, a cariporide, and analogs thereof.

108. (New) A method for regulating salt uptake or release by ciliary epithelial cells of a human eye or eye of an animal having a trabecular network, by controlling or modulating the function of one or more antiports of aqueous humor ciliary epithelial cells by administering to the ciliary epithelial cells of the aqueous humor a modulating amount of a pharmaceutical composition consisting essentially of an NHE inhibitor.

109. (New) The method of claim 108, wherein the modulating effect is reversible upon cessation of administration of the NHE inhibitor.

110. (New) The method of claim 108, wherein the pharmaceutical composition is administered to the cells *in vitro* or *in vivo*.

111. (New) The method of claim 108, wherein the NHE inhibitor is selected from the group consisting of amilorides and cariporide.

112. (New) The method of claim 108, wherein the NHE inhibitor comprises an amiloride or amiloride analog.

113. (New) The method of claim 112, wherein the amiloride comprises either amiloride or ethyl-isopropyl-amiloride.

114. (New) The method of claim 108, wherein the NHE inhibitor comprises cariporide.

115. (New) The method of claim 108, wherein an anion is transferred into the ciliary epithelial cells of the aqueous humor to block native chloride channels.

116. (New) The method of claim 115, wherein the anion comprises cyclamate.